# STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

## MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0098451

Owner: Northeast Public Sewer District (NPSD)
Address: 400 Biltmore, Suite 414, Fenton, MO 63026

Continuing Authority: Same as above Address: Same as above

Facility Name: NPSD, Whispering Winds Subdivision Facility Address: Ozark Drive, High Ridge, MO 63049

Legal Description: NW ¼, SW ¼, NW ¼, Sec. 23, T43N, R4E, Jefferson County

Latitude/Longitude: +3827130/-09032566

Receiving Stream: Tributary to Antire Creek (U)(losing)

First Classified Stream and ID: Antire Creek (P) (02188)

USGS Basin & Sub-watershed No.: (07140102-080001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

### **FACILITY DESCRIPTION**

Outfall #001 - POTW - SIC #4952

Single cell facultative lagoon/temporary chlorine measures currently being employed/sludge is retained in lagoon.

Design population equivalent is 211.

Design flow is 21,100 gallons per day.

Actual flow is 17,000 gallons per day.

Design sludge production is 3.1 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of

the Law.

November 16, 2001 August 23, 2002

Effective Date Revised

Stephen M. Hahfood, Director, Department of Natural Resources Executive Screetary, Clean Water Commission

November 15, 2006
Expiration Date

Jim Hull, Director of Staff, Clean Water Commission

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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PERMIT NUMBER MO-0098451

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until November 30, 2002. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTEAU ANNADED AND EFFLUENT		INTERIM EFFLUENT			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand <sub>5</sub> ***	mg/L		45	45	once/quarter**	grab
Total Suspended Solids***	mg/L		65	65	once/quarter**	grab
pH - Units	SU	* * * *		****	once/quarter**	grab
Total Residual Chlorine	mg/L	1.0		1.0	once/quarter**	grab
Fecal Coliform	#/100mL	1000		400	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>January 28, 2003.</u> THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

## **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I, II & III STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

#### PAGE NUMBER 3 of 6

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMIT NUMBER MO-0098451

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective December 1, 2002, and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTEAU AND EEG VENT		FINAL EF	FLUENT LIN	IITATIONS	MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 (Note 1)						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand <sub>5</sub> ***	mg/L		15	10	once/quarter**	grab
Total Suspended Solids***	mg/L		20	15	once/quarter**	grab
pH - Units	SU	****		****	once/quarter**	grab
Total Residual Chlorine (Note 2)	mg/L	1.0		1.0	once/quarter**	grab
Fecal Coliform	#/100mL	1000		400	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>January 28, 2003.</u> THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

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MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per quarter in the months of February, May, August, and November.
- \*\*\* This facility is required to meet a removal efficiency of 65% or more.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 - These limits only apply if wastewater is still being discharged on site. These limits do not apply to water being routed to NPSD.

Note 2 - This permit contains a Total Residual Chlorine (TRC) limit.

a. If the TRC limit in this permit is 0.01~mg/L or 0.2~mg/L, you  $\frac{\text{must use}}{\text{must net}}$  an analytical method that has a quantification limit of no greater than 0.05~mg/L TRC. For reporting purposes on the discharge monitoring report (DMR), all analytical values below 0.05~mg/L shall be reported as "<quantlim." All analytical values at or above the quantification limit of 0.05~mg/L shall be reported as the measured value. The permittee shall report the quantification limit in the remarks section of the DMR.

The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average.

The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 2 - Total Residual Chlorine (TRC)(continued)

b. If the TRC limit in this permit is 1.0 mg/L; you <u>must use</u> an analytical method with a quantification limit between 0.2 and 0.5 mg/L. All analytical values below the quantification limit shall be reported as "<quantlim." All analytical values at or above the quantification limit shall be reported as the measured value.

The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average.

The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.

- c. Disinfection is required year-round unless the permit specifically states that "Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31." If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- d. Do not chemically dechlorinate if it is not required in your permit.
- e. If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as "0 mg/L" TRC.

### C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.

#### C. SPECIAL CONDITIONS (continued)

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100  $\mu$ g/L);
  - (2) Two hundred micrograms per liter (200  $\mu g/L$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu g/L$ ) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.
- 6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (e) There shall be no significant human health hazard from incidental contact with the water;
  - (f) There shall be no acute toxicity to livestock or wildlife watering;
  - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
  - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
  - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon clean-out and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

#### D. SCHEDULE OF COMPLIANCE

On 10-18-99 a Settlement Agreement was finalized between Northeast Public Sewer District (NPSD), Missouri Attorney General (AGO), and Missouri Department of Natural Resources (MDNR). The agreement set timelines for eliminating the Whispering Winds lagoon. On 3-26-01, Construction Permit 22-6088 was issued allowing construction of the sewage works necessary to direct the sewage flow to the NPSD, Ron Rog STP (MO-0054151). On 10-26-01, MDNR approved an extension of time to start construction. This Schedule of Compliance reflects the Settlement Agreement and approved time extension. This permit can not be terminated until the lagoon is properly closed in accordance with a closure plan approved by the Department of Natural Resources.

#### CONSTRUCTION

- 1. By October 31, 2001, begin construction of sewage works in accordance with construction permit 22-6080.
- 2. By August 31, 2002, complete construction and direct all sewage flow to NPSD, Ron Rog STP.
- 3. If discharges are not routed to NPSD by September 1, 2002, those discharges are subject to the final effluent limitations.

#### CLOSURE OF OLD LAGOON

- 1. By September 30, 2002, submit lagoon closure plan prepared in accordance with Special Conditions Part III, of this permit.
- 2. Within 120 days of plan approval, close lagoon in accordance with approved closure plan and request termination of this permit.